REMARKS

The Applicants respectfully submit this Amendment and Request for Reconsideration in response to the Office Action mailed on 25 August 2006, entry and consideration of which is earnestly solicited.

The present Amendment amends claims 1, 2, 4, 6, 7, 8, 10, 12, 13, 15, 17, 18, 20, 21, 22, 23, 25, 26, 27, 28, 30, 31 and 32, and adds new claims 33-50; no claims have been canceled. Therefore, claims 1-32 as amended and new claims 33-50 are pending in the present application for consideration. As required by 35 U.S.C. § 132, the Applicants respectfully submit that no new matter has been added. Claims 1-32 as amended and new claims 33-50 are fully supported by the original application as filed.

In the Office Action mailed on 25 August 2006, the Examiner rejected claims of the present application under 35 U.S.C. § 102(e) based on Abrahamson et al. (U.S. Patent Application Publication 2004/0109431) (the "Abrahamson reference"). In response, the Applicant respectfully disagrees with the rejection and submits that all pending claims are allowable over the prior art of record for at least the following reasons.

For a proper rejection under 35 U.S.C. § 102(e), the prior art must teach or suggest each and every claimed limitation. In the present case, the prior art fails to teach each and every limitation of the claims.

More particularly, the prior art fails to teach or suggest the steps of claims 1-17 which occur either "in response to regaining signal coverage from an out-of-coverage condition with the non-home communication network" or "in response to being powered-on from a power-off state entered while operating with the non-home communication network." As recited in such claims, the following steps are employed in response to such events: "if a home communication network of the mobile station is identified as being available, selecting and operating with the home communication network" and

"otherwise, if the non-home communication network is identified as being available, selecting and operating with the non-home communication network."

According to conventional GSM techniques, after recovering from an out-of-coverage condition, a mobile station operates to select the PLMN with which it had just previously registered (i.e. its "RPLMN"). If the RPLMN is unavailable, the mobile station performs a scan to identify and select a PLMN which may be the HPLMN. However, the specifications do not clearly and specifically address the situation where the RPLMN is not the HPLMN of the mobile station. If the RPLMN is not the HPLMN, and the HPLMN is available after the recovery from the out-of-coverage condition, it is specified that the mobile station is limited to selecting the non-home RPLMN (if available) upon recovery. Such conventional operation is described in ETSI specs 3.22/23.122.

The present invention provides an inventive solution to such problem. See page 19 at lines 26-31 of the present application:

> Thus, the above method provides a solution to a problem that the specifications do not clearly and specifically address: the situation where the RPLMN is not the HPLMN of the mobile station. If the RPLMN is not the HPLMN, and the HPLMN is available after the recovery from the out-of-coverage condition or after power-on, the standards specify that the mobile station is limited to selecting the non-home RPLMN (if available).

Note that new independent claim 50 is directed to the particular embodiment as it relates specifically to Global Systems for Mobile Communications (GSM) networks utilizing HPLMNs and RPLMNs.

The Abrahamson reference reflects such teachings of the prior art. The specific emphasis in the Abrahamson reference, however, is on cell reselection techniques between GSM and W-CDMA networks for dual-mode mobile devices. The Abrahamson reference places no emphasis or focus on network selection techniques. In the rejection of claims, the Examiner makes specific references to paragraphs in the Abrahamson reference. In paragraphs 67-68 of the Abrahamson reference, for example, it is stated that:

W-CDMA defines a mechanism whereby a terminal operating on a VPLMN periodically attempts to obtain service on its HPLMN or a higher priority PLMN. This mechanism is referred to as an HPLMN background search mechanism and is described in a document 3GPP TS 23.122, section 4.4.3.3. The HPLMN background search is performed periodically if the terminal is roaming and in idle mode. The first HPLMN background search is performed between 2 to T minutes from the time the terminal is powered on, and each subsequent background search is performed T minutes from the prior background search. The value for the parameter T may be configured by the network operator and is stored in an elementary file EF_{HPLMN}, which is stored in a SIM or a USIM. If a value is not specified for T, then a default value of 60 minutes is used for the background search. The elementary file EF_{HPLMN} for the SIM is described in document 3GPP TS 31.102, section 4.2.6.

Searches for W-CDMA cells may be performed periodically at regular time intervals. In one embodiment, W-CDMA searches may be performed automatically by the terminal at the same time that HPLMN background searches are performed (i.e., every T minutes, except for the first background search which is between 2 and T minutes from power on). In another embodiment, W-CDMA searches may be performed at time intervals that are less than or greater than T minutes. The time duration between W-CDMA searches may be indicated by a parameter T_{WCDMA}, which may be stored in non-volatile memory for the terminal. The use of a separate T_{WCDMA} parameter for the time period between W-CDMA searches allows the terminal to perform W-CDMA searches at the desired frequency.

As detailed above, the Abrahamson reference describes both HPLMN background searches and W-CDMA cell searches. As made apparent, HPLMN background searches and W-CDMA cell searches are two _different_ types of searches employed by the mobile device. Also as made apparent, HPLMN background searches of the prior art are performed on a _periodic basis based on a timer_ (perhaps as long as once per hour). Note further that an HPLMN background search of the prior art is performed while a network connection is already made and available, not when made such network connection is unavailable (e.g. regaining signal coverage from an out-of-coverage condition, or powering on the mobile station from a power-off state entered while operating with the non-home communication network). As stated in the Abrahamson reference, the

HPLMN background and W-CDMA cell searches may be triggered merely by an expiration of the <u>same timer</u>.

In paragraph 70 of the Abrahamson reference, it is stated that "a W-CDMA search may be performed if the terminal enters coverage after losing coverage of the last GSM network." Again, however, a W-CDMA cell search of the Abrahamson reference is <u>not</u> the same thing as an HPLMN background search. Therefore, there is no teaching or suggestion that a HPLMN background search is performed in response to the mobile device regaining coverage from an out-of-coverage condition. As apparent, the Abrahamson reference teaches the same deficiencies of conventional techniques.

For these reasons alone, rejection of claims 1-17 are now overcome.

In an issue related to the above-stated problem of prior art techniques, GSM standards also specify that if the last RPLMN is unavailable while the mobile station is in "manual" network selection mode, the mobile station shall camp on any network providing emergency service. This selected network, however, may not be the optimal network with which to operate, especially, for example, if the home network is made available.

The present application is directed further to a solution to this additional problem with manual network selection, and is defined in claims 18-32 and new dependent claims 44-49. The prior art of record fails to teach or suggest other steps which occur "in response to regaining signal coverage from an out-of-coverage condition with the manually-selected non-home communication network" or "in response to being powered-on from a power-off state entered while in the manual network selection mode." In particular, the prior art fails to teach the following steps which are utilized after such events: "if the non-home communication network is unavailable and the home communication network is also unavailable: causing a list of available communication networks to be displayed for a manual network selection procedure for manual network selection and operation with one of the available communication networks" and "if the non-home communication network is unavailable but the home communication network is identified as being available: instead of carrying out the manual network selection

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procedure for the manual network selection and operation with one of the available communication networks, selecting and operating with the home communication network."

More specific techniques related to this general approach are recited in new dependent claims 46 and 47, for example. In new dependent claim 46, for example, the act of selecting and operating with the home communication network is performed after an expiration of a predetermined time period. In new dependent claim 47, for example, the technique further involves "prior to selecting and operating with the home communication network: causing a visual input prompt to be displayed for manual network selection of the home communication network; and wherein the act of selecting and operating with the home communication network is performed in response to receiving the manual network selection of the home communication network via the visual input prompt."

The above-stated and claimed techniques are advantageous, for example, as described on page 22 at lines 1-5:

> Advantageously in FIG. 7, even in a manual selection mode where choices are made by the end user, the mobile station makes the end user aware of recent availability of the home network in a timely and unobtrusive fashion. Overall, the mobile station helps facilitate the selection of the best network for the end user even in the manual selection mode.

For these reasons alone, rejection of claims 18-32 as amended are now overcome.

Thus, for the reasons stated herein, claims 1-32 as amended, new dependent claims 33-49, and new independent claim 50 are allowable over the over the prior art of record.

In the same Office Action mailed on 25 August 2006, the Examiner objected to minor informalities in the Abstract and the Specification. In response, the Applicants have corrected such informalities.

The Applicant respectfully requests entry of the Amendment, reconsideration of the application and claims as amended, and allowance of the application as all requirements have now been met.

Thank you. Please feel free to contact the undersigned if there are any questions or concerns regarding this submission.

Respectfully submitted,

/John J. Oskorep/

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